

## ABSTRACT OF THE DISCLOSURE

Copper alloys having excellent strength while suppressing irregularity of wavelengths, etc., of the fluctuations and having excellent bendability are obtained while suppressing growth of crystal grains. The copper-based alloy contains 2.0 to 4.0 mass% of Ti, and the total content of unavoidable impurity elements Pb, Sn, Zn, Mn, Fe, Co, Ni, S, Si, Al, P, As, Se, Te, Sb, Bi, Au, and Ag is not more than 0.1 mass%, and contents of each element thereof is not more than 0.01 mass%, and not less than 80% of quality of a second-phase particles having an area of not less than  $0.01 \mu\text{m}^2$  observed by a cross section speculum contains not less than 3% of the total amount of the above described unavoidable impurity elements in composition.